

OSC Kroetsch

WESTON • SPER

River Center, 111 North Canal Street, 8th Floor, Suite 855,
Chicago, IL 60606 (312) 993-1067

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-01-7367

Mr. Steven J. Faryan
Deputy Project Officer
Emergency Response Section
Western Response Unit
U.S. Environmental Protection Agency
11th Floor
230 South Dearborn Street
Chicago, Illinois, 60604

US EPA RECORDS CENTER REGION 5



August 1, 1988

TAT-05-G2-00533

Re: Wick Elementary Site, Wayne County, Michigan
TDD# 5-8705-09A

Dear Mr. Faryan:

On May 31, 1987, the U.S. Environmental Protection Agency tasked the Technical Assistance Team (TAT) to perform a site assessment of the Wick Elementary site located in the city of Romulus in Wayne County Michigan. The enclosed site assessment report outlines the background of the site and describes its current status. Based upon the TAT site investigation and analytical results, the TAT recommends securing the site, conducting additional sampling, and submitting the report to the Agency for Toxic Substances and Disease Registry for an evaluation and recommendations.

Should you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,

ROY F. WESTON, INC.

Scott D. Springer
Technical Assistance Team
Leader, Region V

Roy F. Weston, Inc.

SPILL PREVENTION & EMERGENCY RESPONSE DIVISION

In Association with ICF Technology Inc., C.C. Johnson & Malhotra, P.C., Resource Applications, Inc.,
Geo/Resource Consultants, Inc., and Environmental Toxicology International, Inc.

SITE ASSESSMENT
FOR
WICK ELEMENTARY
ROMULUS, MICHIGAN

Prepared For:
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois

CONTRACT NO. 68-01-7367

TAT-05-G2-00533

TDD NO. 5-8705-09

Prepared By:
WESTON-SPER
Technical Assistance Team
Region V

August 1988

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1.0 SITE DESCRIPTION

The Wick Elementary Site is located in Wayne County, Michigan within the city of Romulus. The site, encompassing approximately 80 acres, is bordered on the north by Ecorse Road, on the east by the C & O Railroad, on the south by Wick Road, and on the west by Cogswell Road (Figures 1 and 2). The geology of the site consists of 5 to 30 feet of sandy loam overlaying 10 to 40 feet of clay. The surrounding land is used for commercial, residential, and limited industrial purposes. The homes and schools on the site utilize the Detroit municipal water supply system.

There are four zones of concern at the Wick Elementary site (Figure 3):

- o The first, Mendrek Landfill, located in the northeast section, is relatively flat, with 15-foot embankments on the west side leading to the Mendrek drain, which circles the landfill and flows north across Ecorse Road;
- o The second, Satterlie Landfill, located in the southeast section, is hilly with a myriad of bike trails transversing it and although the western perimeter is fenced, there are many missing and broken sections. The Satterlie Drain runs through the southern part of this zone, and flows south across Wick Road;
- o The third, situated on a flat topography, is the Wick Elementary and North Junior High School complex located on Nick Road at 36900 and 37300 respectively, and includes three baseball diamonds and one running track north of the schools. There are over 1,300 students enrolled at the two schools.
- o The fourth is the eight residential homes bordering the site on Ecorse and Wick Roads.

2.0 SITE BACKGROUND

Satterlie and Mendrek Landfills were operated in the 1940's and 1950's. The Mendrek Landfill was purchased by Auto Pallets, Inc. in 1958, which used the land as a storage yard for pallets. The Satterlie Landfill ceased operation sometime in the 1960's. Because poor records were kept with regard to operating dates, procedures, and types of wastes accepted, details were unavailable.

On January 28, 1980, a janitor at the Wick Elementary school notified the Michigan Department of Natural Resources (MDNR) that leachate was migrating from the Satterlie Landfill into the Satterlie Drain. The leachate was described as oily, with a

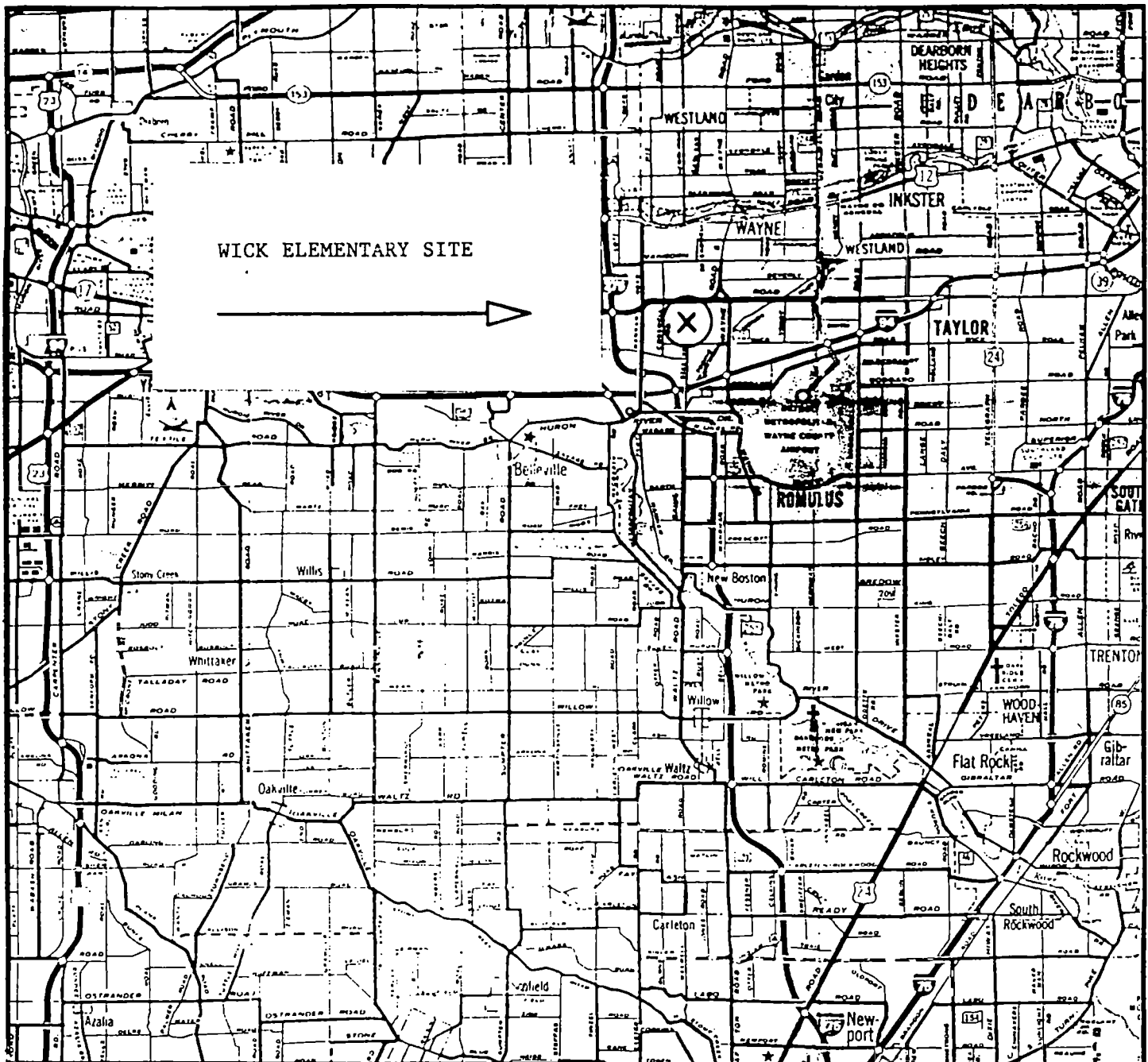


FIGURE 1

no scale

**WICK
ELEMENTARY
SITE**

ROY F. WESTON, INC.

WESTON
ENVIRONMENTAL CONSULTANTS-DESIGNERS

DRAWN
M.W. TURNBULL
CHECKED

DATE
9/9/87

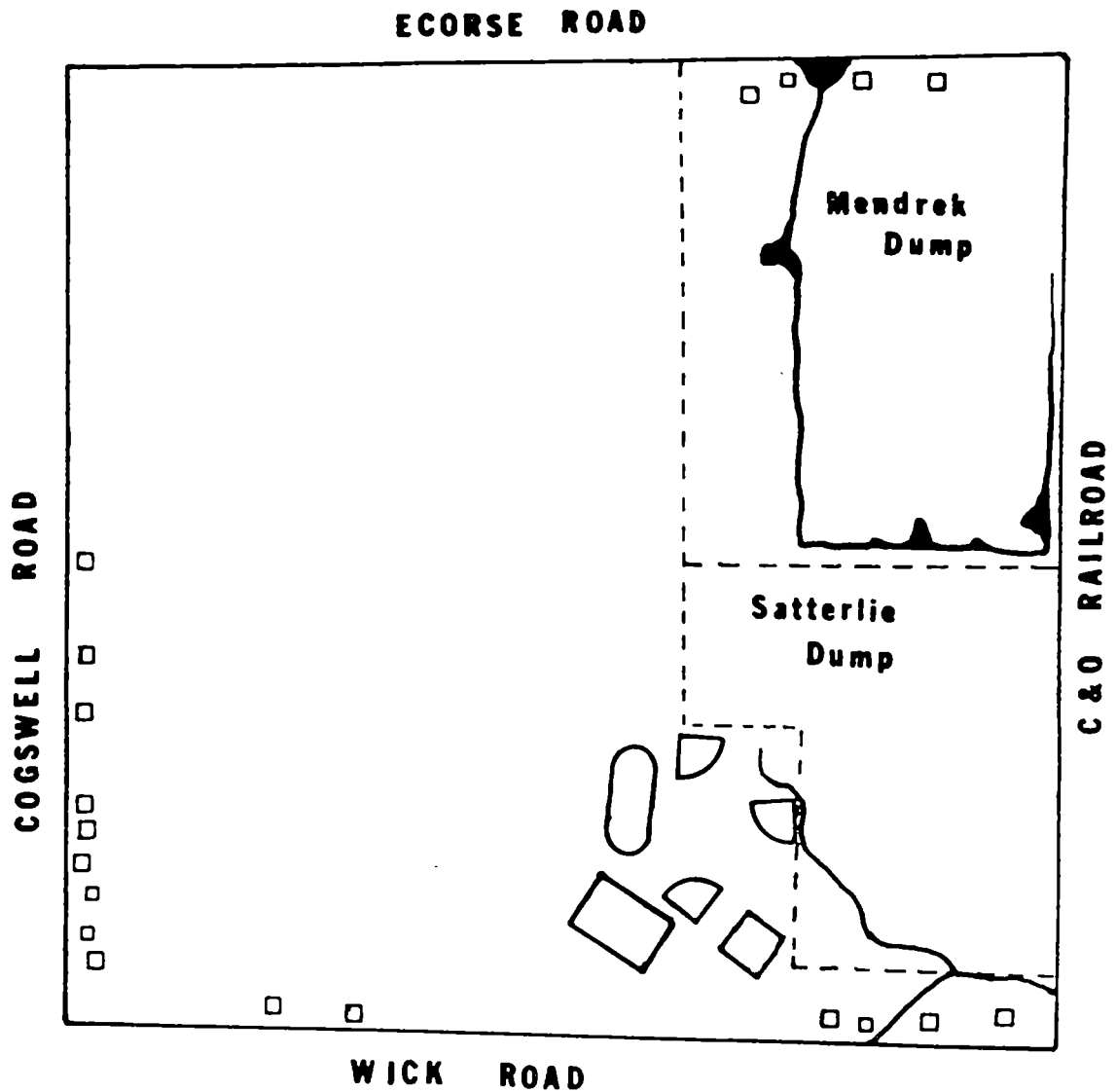
DES. ENG.
APPROVED

DATE

W. O. NO.

DWG. NO.

FIGURE 2



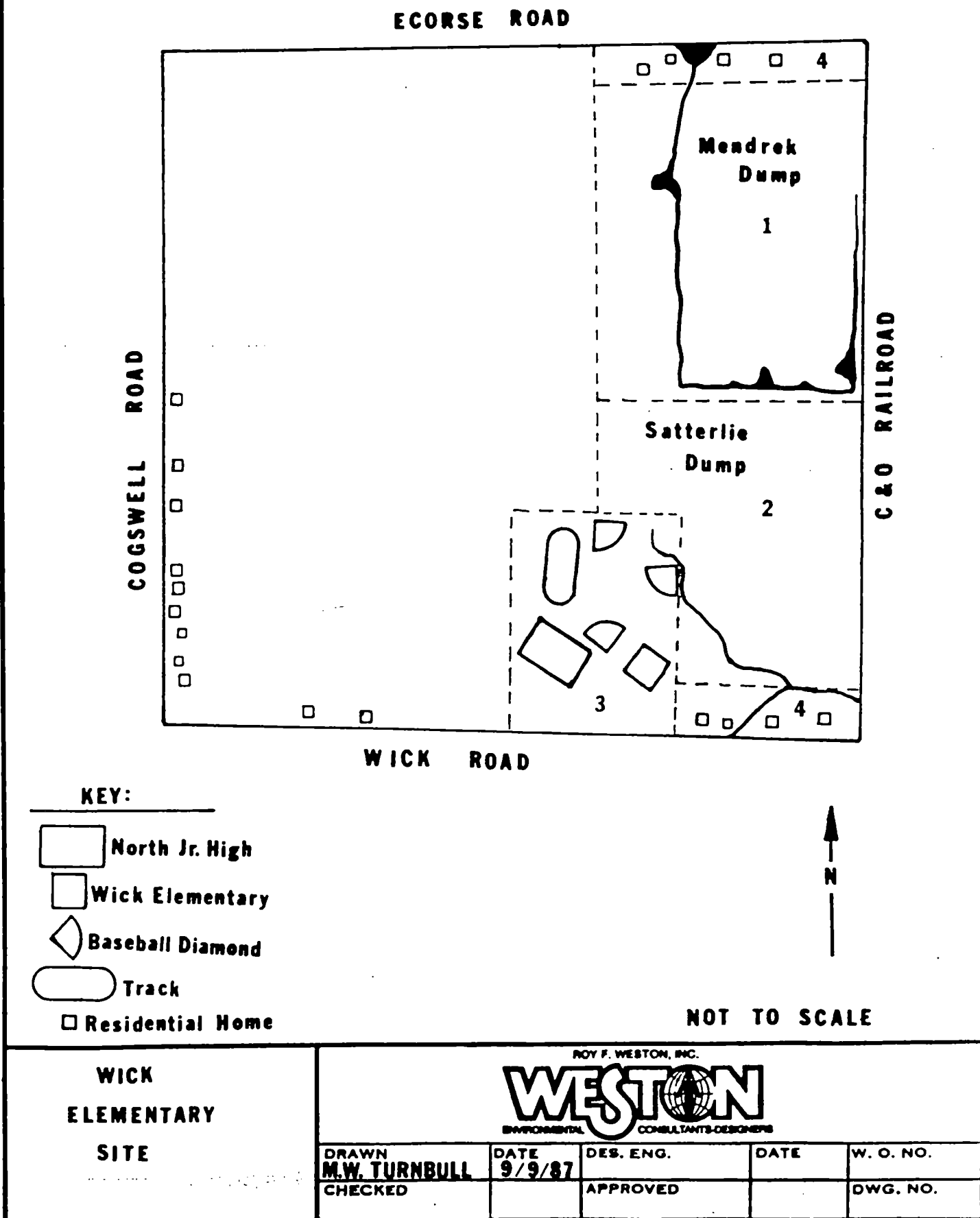
**WICK
ELEMENTARY
SITE**

ROY F. WESTON, INC.

WESTON
ENVIRONMENTAL CONSULTANTS-DESIGNERS

DRAWN M.W. TURNBULL	DATE 9/9/87	DES. ENG.	DATE	W. O. NO.
CHECKED		APPROVED		DWG. NO.

FIGURE 3
Zones of Concern



solvent-like odor. On January 30, 1980, the Satterlie property adjacent to Wick Elementary school was investigated by the MDNR. The inspection revealed the presence of 200 to 300, 55-gallon drums on site.

On February 13, 1980, the MDNR sampled the leachate, and the ensuing analysis showed xylene was present along with traces of oil. The drums contained sand from milling waste and were determined to be non-hazardous.

On November 29, 1983, MDNR personnel Rich Stagen and Dean Tuomari conducted a site survey to record run-off directions and document any visible leachate areas at both the Satterlie and Mendrek Landfills. There was no evidence of leachate seepage.

On February 6, 1985, an underground fire was detected at the Satterlie Landfill. MDNR personnel Burgess, Gauthier, Monroe and Pitts coordinated site activities to extinguish the fire utilizing Act 307 Contingency Funds. Monroe and Gauthier, took organic vapor analyzer (OVA) and photoionization detector (HNU) readings of the smoke at its source. The highest readings on both meters was 22 units as calibrated to benzene with the HNU and methane with the OVA.

On January 20, 1987, the MDNR sampled the Satterlie Drain and 11 of the drums on site. In the drain 1,1 dichloroethane was detected at 8.9 and 9.7 parts per billion (ppb), while analyses of drum contents showed no organic contaminants above detection limits.

On the morning of May 12, 1987, Romulus Fire Marshal Ed Bradley contacted the Northville branch of the MDNR about an underground fire at the Mendrek Landfill. Mr. Bradley was concerned about the potentially dangerous components of the smoke. The fire was located at the southwestern-most corner of the Mendrek Landfill. The entire fire face blazed approximately fifteen feet off the ground and 200 feet in width. By 1100 hours, the MDNR was on site. Smoke blowing southward caused the evacuation of 1,350 students from both North Jr. High and Wick Elementary schools. At 1345 hours, a dozer started to expose the burning materials and drag the debris through a quenching pit to extinguish the fire. The fire was officially extinguished by 1730 hours.

3.0 SITE INSPECTION

On July 6, 1987, Technical Assistance Team (TAT) members Ann Patchak, Rob McLeod, and Mike Turnbull met U.S. Environmental Protection Agency (U.S. EPA) On Scene Coordinator (OSC) Loretta Kroetsch at the Mendrek Landfill to sample both the Mendrek and Satterlie Landfill drain areas. Upon entering the site, the TAT spoke with Romulus Director of Ordinances Steve Banko. Mr. Banko

stated that a few days earlier he had observed leachate emanating from the banks of the Satterlie Drain near the northwestern-most baseball diamond on the Wick Elementary School property. The OSC and TAT established two sample locations within the leachate outbreak area (Figure 4).

Eight sediment and three water samples were collected and analyzed for full-scan organics and inorganics. At the leachate outbreak area, one water sample as well as duplicate sediment samples were collected. These appear as stations 1 and 2 respectively. Water samples were collected at locations 1, 7, and 8. At stations 1, 2, 3, and 7, sediments were collected by compositing the upper 6 inches of sediment into a bag-lined box. Sediment samples at stations 4, 5, and 6 were collected with a modified protocol due to increased water depth. A PVC pipe was utilized as a disposable core sampler. The pipe was driven into the sediment to a depth of approximately 1 foot, capped, extracted, and the contents released into a bag-lined box. A background sediment sample was collected from the south side of Ecorse Road, and was designated as station 8. The samples were submitted for laboratory analysis to Thermo Analytical under TAT Analytical Services TDD# 5-8706-L4.

On July 22, 1987, TAT members Mcleod and Turnbull returned to Wick Elementary to photo-document the site.

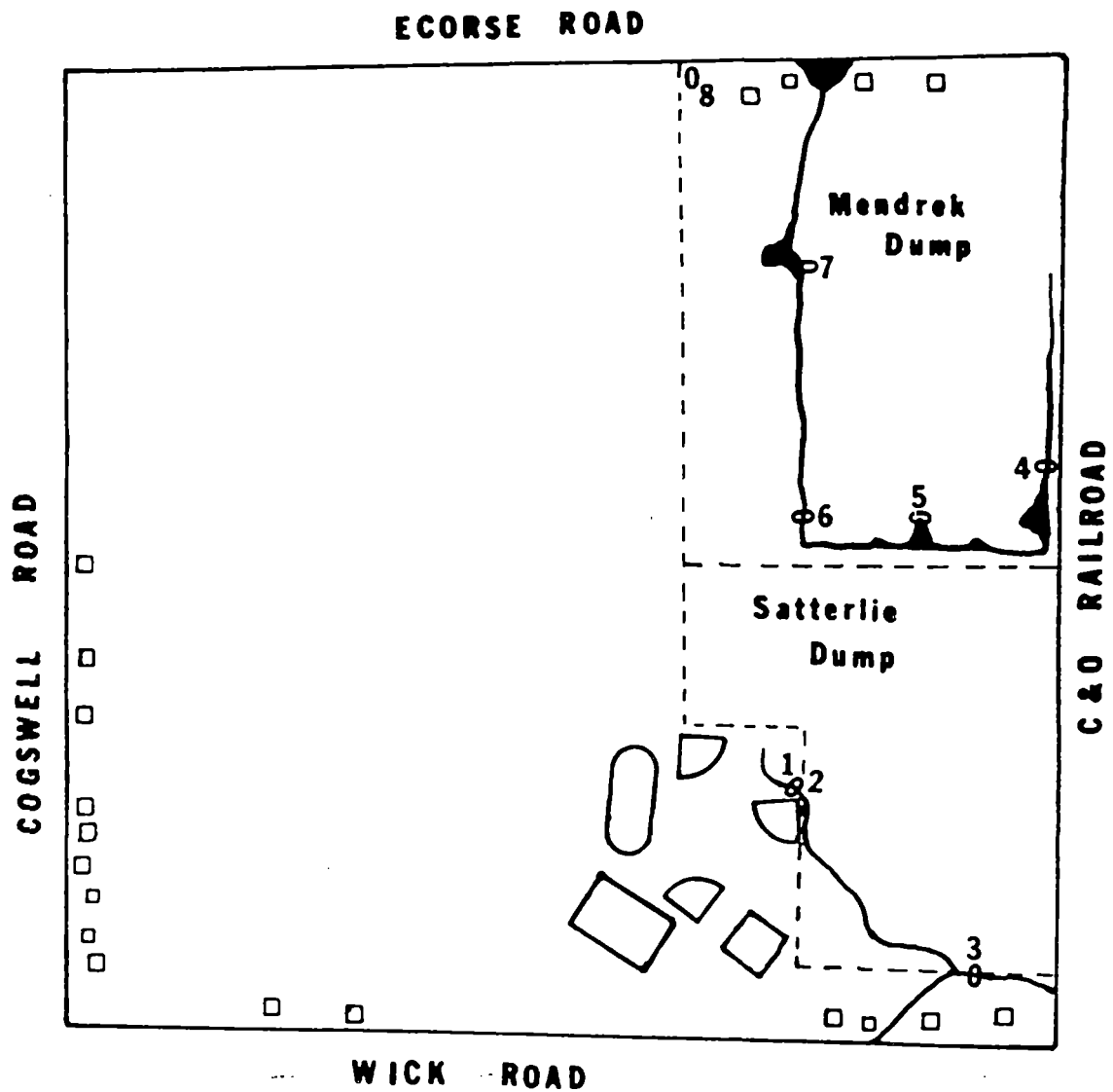
4.0 ANALYTICAL RESULTS

Several organic compounds were detected in sediment samples from stations 4, 5 and 6 which included bis(2-ethylhexyl)phthalate (18.0 ppm), methylene chloride (0.043 ppm), fluoranthene (1.0 ppm), and 1, 2-dichloroethane (0.47 ppm). Polychlorinated biphenyls (PCBs) were detected at most sample locations (1, 2, 3, 4, 6, 8) but concentrations were all at or below 0.24 ppm (Table 1).






The cadmium concentrations in all sediment samples including the background location (8) were above the typical concentration range for natural soils. Three stations and the background sampling station indicated slightly elevated levels of selenium (4, 6, 7, and 8). Zinc concentrations were slightly elevated at location 5, but were four times higher than the typical maximum concentration of natural soils at station 6.

Total sulfide concentrations in sediment from all stations were elevated above background levels (station 8). Stations 4, 5 and 6 had the highest concentrations of 2,000 ppm, 4300 ppm, and 1200 ppm respectively (Table 2).

FIGURE 4
Sampling Locations



KEY:

-  North Jr. High
-  Wick Elementary
-  Baseball Diamond
-  Track
-  Residential Home

**WICK
ELEMENTARY
SITE**

ROY F. WESTON, INC.

WESTON
ENVIRONMENTAL CONSULTANTS-DESIGNERS

DRAWN M.W. TURNBULL	DATE 9/9/87	DES. ENG.	DATE	W. O. NO.
CHECKED		APPROVED		DWG. NO.

TABLE 1
ANALYTICAL RESULTS OF TAT SEDIMENT SAMPLING*
WICK ELEMENTARY SITE
JULY 7, 1987
(results in ppm)

CONTAMINANT	STATION NUMBER							
	1	2	3	4	5	6	7	8
Di-n-butylphthalate	0.620	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	0.640	ND	ND	18.0	1.7	0.65	ND	ND
Methylene chloride	ND	ND	ND	0.043	0.015	0.028	ND	ND
Fluoranthene	ND	ND	ND	1.0	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	0.47	ND	ND	ND
PCB 1248	0.088	0.11	ND	0.071	ND	0.05	ND	ND
PCB 1254	0.058	0.054	0.023	0.13	ND	ND	ND	ND
PCB 1260	ND	ND	ND	ND	ND	0.19	ND	0.023
Total PCBs (1248,1254,1260)	0.146	0.164	0.023	0.201	ND	0.24	ND	0.023

ND - Not Detected at Method Detection Limits

* Analytical Performed by Thermo Analytical Inc., Ann Arbor, Michigan

TABLE 2
ANALYTICAL RESULTS OF TAT SEDIMENT SAMPLING¹
WICK ELEMENTARY SITE
JULY 7, 1987
(results in ppm)

CONTAMINANT	STATION NUMBER								TYPICAL CONCENTRATIONS*	
	1	2	3	4	5	6	7	8	RANGE	AVERAGE
ALUMINUM	2,700	2,600	5,400	1,900	250	3,100	4,300	5,000	10,000 - 300,000	71,000
ARSENIC	1.8	2.1	1.3	0.47	ND	0.014	1.0	1.6	1 - 50	5
BARIUM	38	35	48	52	48	280	23	32	100 - 3,000	430
BERYLLIUM	0.14	ND	0.26	ND	ND	ND	0.27	ND	0.1 - 40	6
CADMIUM	2.3	0.93	1.4	1.4	2.4	1.1	0.75	1.0	0.01 - 0.7	.06
CALCIUM	15,000	15,000	3,500	28,000	10,100	4,000	4,300	7,000		
CHROMIUM	13	11	11	11	14	120	8.3	14	1 - 1,000	100
COBALT	1.6	1.7	2.6	3.9	1.4	0.58	1.4	2.0	1 - 40	8
COPPER	13	6.8	9.9	23	24	16	11	8.9	2 - 100	30
IRON	4,200	4,400	6,100	8,100	19,000	5,000	3,200	5,400		
LEAD	88	85	16	52	56	40	3.0	16	2 - 200	10
MAGNESIUM	2,300	2,300	1,300	1,600	640	860	1,600	2,200	600 - 6,000	5,000
MANGANESE	75	74	110	100	150	120	35	69	20 - 3,000	600
MERCURY	0.066	ND	ND	ND	ND	ND	ND	ND	0.01 - 0.3	.03
NICKEL	6.4	7.8	9.4	10	10	7.8	7.3	9.6	5 - 500	40
POTASSIUM	310	360	460	260	960	610	520	370		
SELENIUM	ND	ND	ND	2.7	1.8	3.0	2.4	2.1	0.1 - 2	.3
SILVER	3.2	1.9	1.4	1.2	3.2	1.6	0.47	1.9	0.01 - 5	.05
SODIUM	81	83	66	300	570	240	300	61		
TIN	2.4	ND	3.5	5.3	8.5	ND	2.2	ND	2 - 200	10
VANADIUM	8.0	9.3	13	8.3	5.0	10	15	19	20 - 500	100
ZINC	44	21	92	200	330	1,200	8.7	31	10 - 300	50
SULFIDE	47	44	9	2,000	4,300	1,200	360	ND		

ND - Not Detected at Method Detection Limit

* Adapted from: HAZARDOUS WASTE LAND TREATMENT, USEPA, SW-874 (April, 1983)

¹ Analytical performed by Thermo Analytical Inc., Ann Arbor, Michigan

Station 6 sample contained the most metallic contaminants above the upper range of metal concentrations in naturally occurring soils. The land above this sampling location is where the May 12, 1987 fire occurred at the Mendrek Landfill. There was little to no vegetation present on the burnt soil at this station during the TAT sampling.

Organics compounds were not detected in any of the water samples. Metals and sulfide concentrations detected in water samples are presented in Table 3. Sulfide concentrations were highest at station 7 (20 ppm). Both stations 1 and 7 revealed elevated concentrations of several metals as compared to background levels of aluminum, arsenic, cadmium, calcium, lead, nickel, and zinc.

5.0 THREATS TO HUMAN HEALTH AND THE ENVIRONMENT

The Wick Elementary site as inspected by the TAT, was found to potentially pose the following threats to human health and the environment as delineated within Section 300.65 (b)(2) of the National Contingency Plan:

- o Potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals, or food chain;
- o Potential contamination of ground water; and,
- o Threat of fire or explosion.

6.0 RECOMMENDATIONS

The Wick Elementary Site as observed on July 6, 1987 may pose a potential threat to human health and the environment. The TAT, therefore, recommends the following actions:

- o Fence the Satterlie Landfill to restrict access;
- o Re-sample to obtain more information on what the sulfide levels are connected with (reactive or nonreactive sulfides), along with organic analyses to verify and delineate previous sample location results; and,
- o Submit the report to the Agency for Toxic Substances and Disease Registry for an evaluation of the site and recommendations for addressing any threats.

TABLE 3
ANALYTICAL RESULTS OF TAT WATER SAMPLES¹
WICK ELEMENTARY SITE
JULY 7, 1987
(results in ppm)

CONTAMINANT	STATION NUMBER		
	1	7	8
=====			
ALUMINUM	12	3.0	0.02
ARSENIC	0.017	0.010	ND
BARIUM	0.61	0.21	ND
CADMIUM	0.01	0.02	ND
CALCIUM	280	250	0.16
CHROMIUM	0.09	0.07	0.12
COBALT	0.01	ND	ND
COPPER	0.05	0.04	0.08
IRON	29	15	ND
LEAD	0.73	0.16	ND
MAGNESIUM	120	180	0.03
MANGANESE	2.4	0.52	0.002
NICKEL	0.06	0.02	0.01
POTASSIUM	44	120	0.13
SELENIUM	0.018	ND	0.003
SILVER	0.009	0.009	0.007
SODIUM	170	160	2.1
VANADIUM	0.06	0.05	ND
ZINC	0.22	0.32	0.02
SULFIDE	ND	20	ND
=====			

ND - Not Detected at Method Detection Limits

¹ Analytical performed by Thermo Analytical
Inc., Ann Arbor, Michigan

TOD verbally given to Scott.

5/14/87

10 35

TOD 8705-09 SA
Wick Elementary School Site

Romulus, MI
City of Romulus.

area may be involved

RJR

Evacuated 2 schools & 150 homes.

L. Kroetch responded 5/12/87
Fire is not out

OSC support by review of MDPK background info
perform site assessment 5/22
Sample of indicated verbal report

EAP, if indicated by 6/8/87
May want magnetometer

Wick Elementary School
Romulus MI
new file



SITE: WICK ELEMENTARY, ROMULUS, MI.

PHOTOGRAPH NUMBER: 3

DIRECTION: NW

RECORDED BY: M.W. TURNBULL (MDNR PHOTOGRAPH) *M.W.T.*

SUBJECT: MENDREK DUMP / AUTO PALLET BOXES INC. BEFORE FIRE



SITE: WICK ELEMENTARY, ROMULUS, MI.

PHOTOGRAPH NUMBER: 4

DIRECTION: WEST

RECORDED BY: M.W. TURNBULL (MDNR PHOTOGRAPH) *M.W.T.*

SUBJECT: FILL IN MENDREK DUMP DRAIN (SW CORNER OF DUMP)



SITE: WICK ELEMENTARY, ROMULUS, MI.

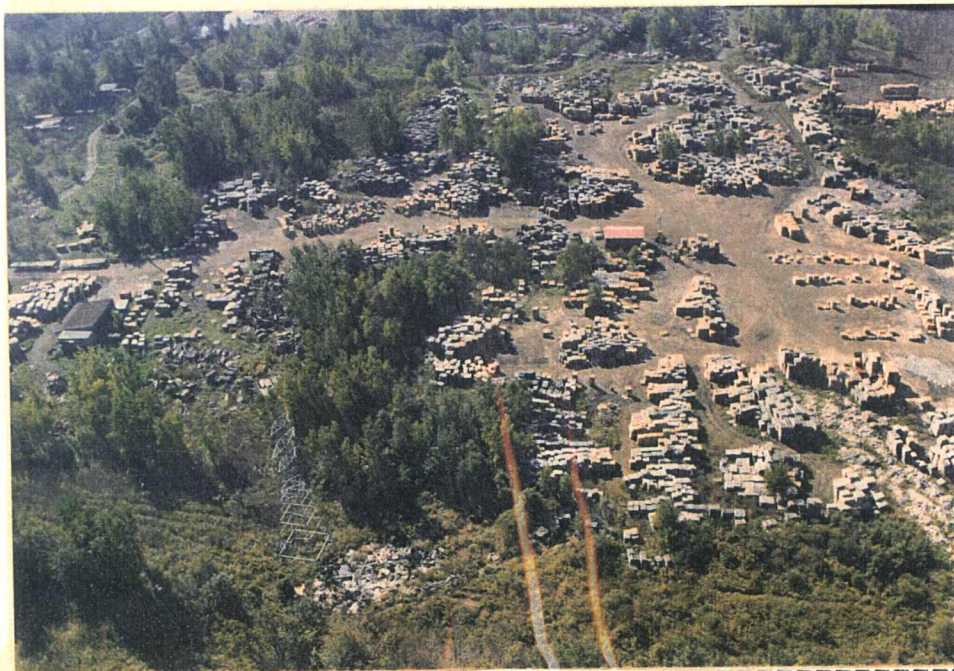
PHOTOGRAPH NUMBER: 1

DIRECTION: NW

RECORDED BY: M.W. TURNBULL (MDNR PHOTOGRAPH)

M.W.T.

SUBJECT: MENDREK DUMP / AUTO PALLET BOXES INC. BEFORE FIRE



SITE: WICK ELEMENTARY, ROMULUS, MI.

PHOTOGRAPH NUMBER: 2

DIRECTION: SOUTH

RECORDED BY: M.W. TURNBULL (MDNR PHOTOGRAPH)

M.W.T.

SUBJECT: MENDREK DUMP / AUTO PALLET BOXES INC. BEFORE FIRE



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987

PHOTOGRAPH NUMBER: 5 DIRECTION: NORTH TIME: 1042

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD

SUBJECT: WICK ELEMENTARY SCHOOL



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987

PHOTOGRAPH NUMBER: 6 DIRECTION: NORTH TIME: 1043

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD

SUBJECT: NORTH JUNIOR HIGH SCHOOL



SITE: WICK ELEMENTARY, ROMULUS, MI.

DATE: 07/17/1987

PHOTOGRAPH NUMBER: 7

DIRECTION: NE

TIME: 1046

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL

WITNESS: ROB MCLEOD

SUBJECT: BASEBALL DIAMOND NE CORNER WICK ELEMENTARY SCHOOL



SITE: WICK ELEMENTARY, ROMULUS, MI.

DATE: 07/17/1987

PHOTOGRAPH NUMBER: 8

DIRECTION: NE

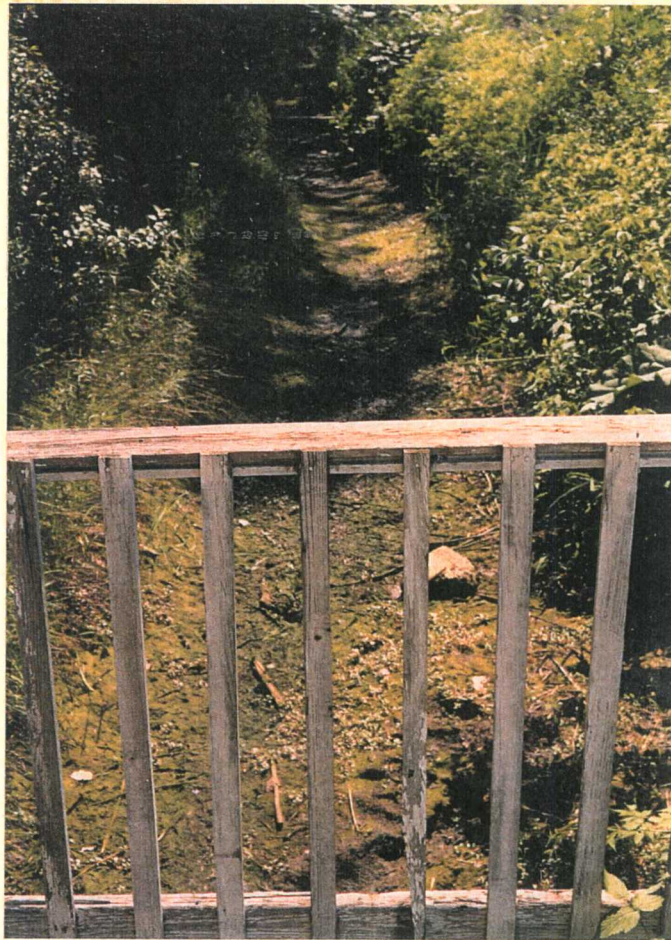
TIME: 1050

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL

WITNESS: ROB MCLEOD

SUBJECT: SAMPLING STATION #1, NE CORNER WICK BEHIND BALL DIAMOND



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987

PHOTOGRAPH NUMBER: 9 DIRECTION: EAST TIME: 1055

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD

SUBJECT: SAMPLING STATION #2, SATTERLIE DUMP DRAIN



SITE: WICK ELEMENTARY, ROMULUS, MI.

DATE: 07/17/1987

PHOTOGRAPH NUMBER: 10 DIRECTION: NORTH

TIME: 1107

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL

WITNESS: ROB MCLEOD

SUBJECT: SAMPLING STATION #3, MENDREK DUMP DRAIN



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987
PHOTOGRAPH NUMBER: 11 DIRECTION: SOUTH TIME: 1109
CAMERA: CANON 35MM SERIAL NUMBER 120724
PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD
SUBJECT: MENDREK DRAIN WITH FILL 25 YDS SOUTH OF SAMPLING STA. #3



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987
PHOTOGRAPH NUMBER: 12 DIRECTION: SOUTH TIME: 1112
CAMERA: CANON 35MM SERIAL NUMBER 120724
PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD
SUBJECT: SE CORNER OF LANDFILL, 150 YARDS WEST OF SAMPLE STAT. #3



SITE: WICK ELEMENTARY, ROMULUS, MI.

DATE: 07/17/1987

PHOTOGRAPH NUMBER: 13 DIRECTION: SOUTH

TIME: 1115

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL

WITNESS: ROB MCLEOD

SUBJECT: SAMPLING STATION #4, MENDREK DUMP DRAIN



SITE: WICK ELEMENTARY, ROMULUS, MI.

DATE: 07/17/1987

PHOTOGRAPH NUMBER: 14 DIRECTION: EAST

TIME: 1116

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL

WITNESS: ROB MCLEOD

SUBJECT: SAMPLING STATION #4, MENDREK DUMP DRAIN



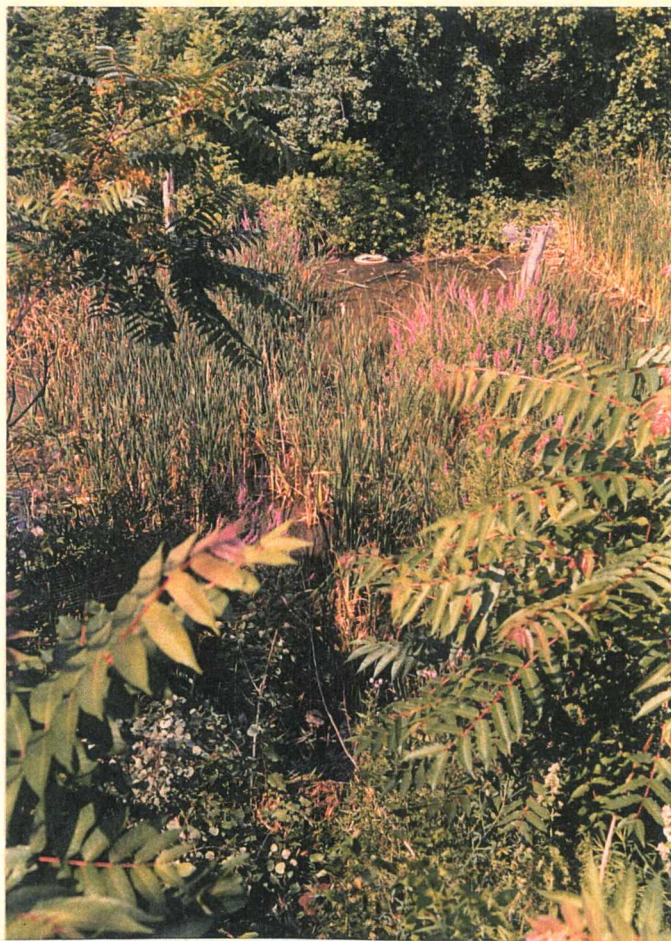
SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987

PHOTOGRAPH NUMBER: 15 DIRECTION: EAST TIME: 1118

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD

SUBJECT: EXPOSED LANDFILL DEBRIS, 50 YARDS WEST OF STATION #4



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987

PHOTOGRAPH NUMBER: 16 DIRECTION: WEST TIME: 1123

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD

SUBJECT: SAMPLING STATION #5, MENDREK DUMP DRAIN



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987

PHOTOGRAPH NUMBER: 17 DIRECTION: WEST TIME: 1128

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD

SUBJECT: PUSHED DEBRIS FROM FIRE, BETWEEN STA. #5 AND STA. #6



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987

PHOTOGRAPH NUMBER: 18 DIRECTION: SOUTH TIME: 1130

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD

SUBJECT: CLAY PUSHED OVER UNDERGROUND FIRE



SITE: WICK ELEMENTARY, ROMULUS, MI.

DATE: 07/17/1987

PHOTOGRAPH NUMBER: 19

DIRECTION: ESE

TIME: 1157

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL

WITNESS: ROB MCLEOD

SUBJECT: STATION #6, MENDREK DUMP DRAIN



SITE: WICK ELEMENTARY, ROMULUS, MI.

DATE: 07/17/1987

PHOTOGRAPH NUMBER: 20

DIRECTION: EAST

TIME: 1157

CAMERA: CANON 35MM SERIAL NUMBER 120724

PHOTOGRAPHER: M.W. TURNBULL

WITNESS: ROB MCLEOD

SUBJECT: SAMPLING STATION #6, MENDREK DUMP DRAIN



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987
PHOTOGRAPH NUMBER: 21 DIRECTION: SE TIME: 1215
CAMERA: CANON 35MM SERIAL NUMBER 120724
PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD
SUBJECT: MENDREK DUMP DRAIN AT ECORSE ROAD



SITE: WICK ELEMENTARY, ROMULUS, MI. DATE: 07/17/1987
PHOTOGRAPH NUMBER: 22 DIRECTION: SW TIME: 1216
CAMERA: CANON 35MM SERIAL NUMBER 120724
PHOTOGRAPHER: M.W. TURNBULL WITNESS: ROB MCLEOD
SUBJECT: MENDREK DUMP DRAIN AT ECORSE ROAD